REMARKS

Independent claim 1 and claims 2-12 depended from claim 1, and independent claim 13 and claims 14-15 depended from claim 13 remain in this application for examination.

Claim Objections:

Claim 1 has been objected to because, according to the Examiner, it appears that Applicant intended to describe the "intake duct" as an "outlet duct". It is respectfully submitted that no structure corresponding to the intake duct (15) is recited in claim 1 because claim 1 may be filled by using any type of conveyance of liquid material including the pipe (15) shown in Fig. 1. The pipe 15 is simply used to fill the tank (2). Since there is no structure such as the pipe (15) claimed in claim 1 there is no basis for the objection.

Drawings:

The product which is taken out of the tank (2) is water or any other liquid which may be used to form a beverage, hot drink or food upon mixing with additives introduced into the mixing devices (7a, ..., 7f). Applicant has amended the drawings to indicate that the outlet ducts 8a-8b, 8c-8d, and 8e-8f have intakes Ia-Ib, Ic-Id and Ie-If. This should clarify the disclosure to remove confusion that may be present with respect to the disclosure as filed. In otherwords, the output ducts are the vertically extending ducts or pipes 8a-8f shown in Fig. 1, each of which vertically

extending ducts has a tangentially positioned intake Ia-Ie, respectively.

Claim Rejections Under 35 U.S.C. §112:

Claims 1-11 have been rejected under 35 U.S.C. §112, first paragraph, because it is not understood how the pump chamber works if it is connected to two intake ducts 8a-8b with no outlet ducts are described. Moreover, it is not understood how the liquid food product in tank (2) is withdrawn, as the only pipe shown is the pipe (15) used to fill the tank, but incapable of emptying the tank as it does not reach into the tank (2).

Applicant's amendments to the specification, claims and drawings address the Examiner's concern. These amendments clarify that the ducts 8a-8f are vertically extending ducts having tangentially position inputs Ia and If. These are shown by the amendments to the Figures 1 and 2 as well as the Figures 3, 4 and 5. The intake of the "box-shaped shell" (12, 103) is shown in Figs. 1 and 5 is the open bottom of the box-shaped shell (12) which fills with water from the tank (2) and is then propelled either through a first intake Ia into the vertical duct 8a or through the intake Ib into the vertical duct 8b to be delivered up the selected vertical duct into the mixing device 7a or 7b. The same arrangement occurs with respect to the box shaped shells (12) of the pumping groups 4b-4c and 4d-4e.

Clearly, the drawing along with the specification describe a functioning, workable device.

Claim Rejections Under 35 U.S.C. §103:

Claims 1-11 have been rejected under 353 U.S.C. §103(a) under several grounds as being obvious over Perkins et al. '235, Ishii '260, Chung '089 and Mainardi '298, all in view of Beaulicu '247. In each case, the primary reference reaches the concept of a pump that has a chamber with two outlets having tangentially disposed inlets that are connected to outlet pipes, whereby a rotating impeller selects which outlet duct will convey liquid depending on whether the impeller rotates clockwise or counterclockwise. The secondary reference Beaulicu '247 teaches a drink dispenser with a heating element. According to the Examiner, it would be obvious to one skilled in the art at the time the invention was made to combine the primary references, each disclosing a reversible impeller for selecting which one of two outlet ducts will convey a liquid, with the liquid drink dispenser of Beaulicu '247. Applicant respectfully traverses this rejection.

Applicant's device is valveless in that the vertically oriented outlet ducts and tangentially positioned intakes are valveless. In other words, there are no obstructions between the outlet ducts 8a, ..., 8f with their associated inlets Ia, .., If and the claimed mixing devices 7a-7f. Accordingly, Applicant's device is valveless.

Each of the primary reference includes a valve. Perkins et al. '235 includes a slidably movable piston (38) that is provide in the chamber (28) for directing the fluid into the tubular passage (32) when the impeller (20) rotates in a clockwise direction. The fluid is directed by the piston (38) into the tubular passage (30) when the impeller rotates in the counterclockwise

direction. The slidably removable piston (38) is in essence a valve forming an obstruction between the impeller and the use of the fluid, which obstruction is antithetical to Applicant's claimed invention.

Ishii '260 discloses the outlet (52) which dispenses liquid by means of a valve (54). Accordingly, the passageway provided by the outlet (53) includes a valve. Therefore Ishii '260is antithetical to Applicant's claimed invention.

Chung '089 includes a movable ball (30) that moves in the passage between the ports (14 and 16). When the impeller rotates in a clockwise direction the ball is guided toward a port (16) and when the impeller moves in the counterclockwise direction, the fluid flows through a second port (16). The ball (30) is an obstruction in the passage and thus provides a valve which again is antithetical to Applicant's claimed invention.

Mainardi et al. '298 includes a distribution element (16) which is accommodated in a seat portion (15). When an impeller (6) rotates in a clockwise direction, the distribution element (16) drifts toward the entry of the conduit (21), thus delivering the fluid into the conduit (20). The distribution element (16) is thus an obstruction or a valve which is within the delivery arrangement for the fluid. Thus Mainardi et al. '298 is also antithetical to Applicant's claimed invention. This is because Mainardi et al. '298 includes a valve identified by the ball (26) which seats in the metering chamber (16) to block the inlet port (20). Applicant's claimed invention is completely valveless between the tank (2) and the mixing devices 7a-7f. Accordingly, none of

the applied references teach Applicant's concept of a valveless device between the tank (2) and the mixing devices 7a-7f.

This is not a distinction without a difference. Applicant directs the Examiner's attention to the specification on pages 3, line 15 - page 5, line 10, which enumerates the problems of the prior art wherein valves are used (specifically, electric valves). Applicants device always ensures that the water available for mixing is directly from the tank since when the impeller is not rotating, water drains from the vertical ducts 8a-8f back into the tank (2) instead of sitting in the vertical ducts. Moreover, the difficulties and expense of electric valves are eliminated by Applicant's valveless configuration.

In order for a rejection under 35 U.S.C. §103 (a) to be sustainable all claimed limitations must be present in the applied references. This is clearly not the case in Applicant's claimed invention wherein the path from the tank (2) to the mixing device says 7a-7f is unobstructed and valveless. The cited references both primary and secondary are all antithetical to Applicant's claimed valveless configuration.

New claim 12 specifically states that the inlets of the outlet ducts are tangential and that first and second directions respectfully so that as the impeller rotates in a first direction heated water flows into one vertical outlet, and when the impeller rotates in the second direction, hot water flows into the other vertical outlet duct. New claim 13 is an independent claim without reference numerals while dependent claim 14 includes the concept of a plurality of pumps 4a-4f. Claim 15 is directed to

the concept of Figs. 3-5 wherein the housing comprises vertically stacked first and second chambers which have first and second vertical outlet ducts with the first and second inlets opening to the tank instead of the pump.

In that this is a full and complete response to the Office Action of November 7, 2008, it is respectfully requested that this application be allowed and passed to issue. If the Examiner for any reason feels that a personal conference might expedite prosecution of this application, the Examiner is respected requested to telephone the undersigned locally.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

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